PHILIPS *STU 801/25R*

PHILIPS

```
0 000000 005888
```
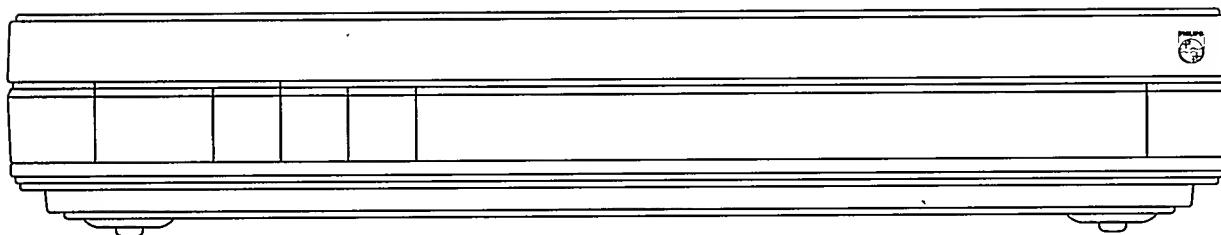
SATELLITE RECEIVER
USER GUIDE

Features

o   Internally fitted VideoCrypt Decoder

o   90 Programmes

o   Wegener PANDA 1 Stereo

o   Three SCART Connectors for VCR, TV and EXTERNAL DECODERS

o   Choice of 4 Stereo or 9 Mono Frequencies per Programme

o   Frequency Synthesized Tuning for Video and Audio

o   On-screen Graphics for Programme Ident, Setup and Timer Functions

o   Full Infra-red Remote Control

o   PIN Coded Programme Lock Facility

o   4-Event 14-Day VCR Timer with On-screen Clock Facility

o   Instant Timer

o   Frequency Scan Mode to assist in finding New Programmes

o   Sophisticated 3-way 'priority routed' SCART Connectors

o   Provides easy method of connecting a MAC receiver to a TV/VCR

o   Supports two External Decoders

o   Real Time Clock display

o   User Definable Programme Ident

o   Front Panel controls

o   Audio Mute

o   UHF Loop through

o   UK Designed and Built

Contents

Introduction

The STU 801 Series Satellite Receivers are quality products designed and built in the UK to provide years of trouble free service.

It is important that you read this manual completely to obtain the best results from your receiver.

It is recommended that installation be carried out by a qualified satellite TV installation engineer.

This stereo receiver is fitted with the PANDA* noise reduction system to enhance its performance.

* PANDA is a trademark of Wegener Communications Inc.

Safe Use of Equipment

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

Do ensure that all electrical connections are properly made and are in accordance with the manufacturers instructions.

Do not obstruct the ventilation slots of the receiver. Never stand it on soft furnishings such as carpets.

Do not use or store the receiver in excessively hot, cold, damp or dusty conditions.

Never allow anyone especially children to push anything into holes or slots or any other opening in the case - this could result in a fatal electric shock.

Always put the receiver into standby mode when not in use.

If you have any doubt about the installation, operation or safety of the receiver, consult your dealer.

Connection To Mains Supply

This satellite receiver operates within the range of 220-240V ~ 50Hz mains supplies, **Do not connect to DC mains.**

TO AVOID THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER OF THIS EQUIPMENT WITHOUT FIRST DISCONNECTING IT FROM THE MAINS SUPPLY.

Mains lead plug connections

The mains lead supplied with this receiver is terminated at one end with a connector to be inserted into the mains input socket on the receiver rear panel.

IMPORTANT: The wires in the mains lead are coloured in accordance with the following code:

Blue   **Neutral**

Brown   **Live**

As the colours of the wires in the mains lead of this apparatus may not correspond with the colour markings identifying the terminals in your plug, proceed as follows:

The blue wire must be connected to the terminal marked with the letter N or coloured black.

The brown wire must be connected to the terminal marked with the letter L or coloured red.

DO NOT connect either the blue or brown wire to the terminal marked by the letter E or by the safety earth symbol ⏚ or coloured green or green and yellow.

A fused plug must be fitted with a **3A** fuse complying with BS 1362. If you are using a non-fused plug, an external fuse must not exceed 5 A.

IF IN DOUBT, CONSULT A COMPETENT ELECTRICAN.
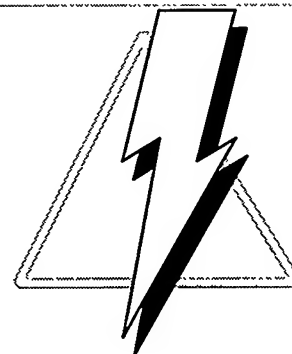
Front Panel Description
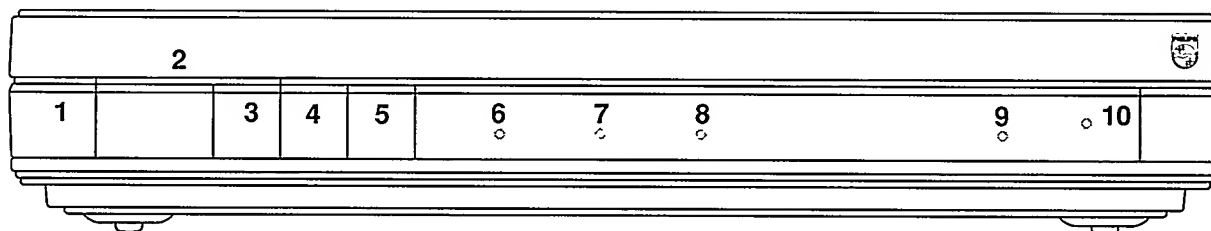
1. Standby key.

2. Card Slot

3. Authorize key (IRD versions)

4. Down key

5. Up key.

6. Timer, Frequency Scan & Setup mode indicator.

7. Stereo mode indicator.

8. Standby indicator.

9. Mains on and Infra-Red Receive indicator.

10. Infra-red receive window.
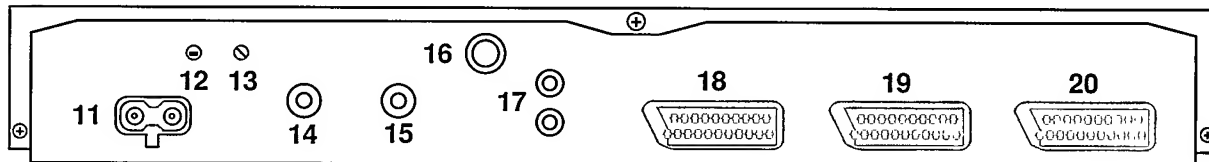
Rear Panel Description

11. Mains Input socket.

12. UHF SETUP/NORM switch.

13. Channel adjustment screw.

14. TV/VCR coaxial socket.

15. AERIAL coaxial socket.

16. LNB IN. Dish aerial cable input connector.

17. Left and Right Audio output sockets.

18. VCR SCART(Peritel) socket.

19. TV SCART(Peritel) socket.

20. DECODER SCART(Peritel) socket.

Handset Description

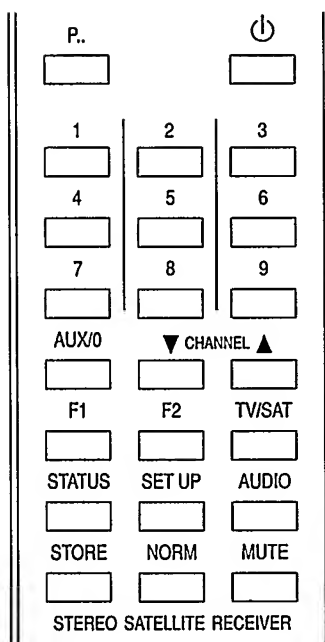| Key	Function
P..	Used in conjunction with the numeric keys to select programme numbers.
1-9	Used to select programmes 1 to 9.
⏻	Standby Key - used to bring the Receiver in and out of the standby mode.
AUX/0	To select an auxiliary programme set up to work with an external decoder.
▲ ▼	To move up and down through the programmes. In menu mode these keys are used to alter parameters.
F1	Favourite Programmes key - to select and move between the pages of the Favourite programmes menu.
F2	Authorize key - to authorize the purchase of Pay-Per-View programmes.
TV/SAT	Used to switch between terrestrial and satellite reception when the TV and receiver are connected using a SCART lead.
STATUS	Displays the current programme status In menu mode this key moves backward through the options.
SETUP	Used in conjunction with numeric keys to select menus. In menu mode this key moves forward through the options.
AUDIO	Used to display and/or change the current programme audio mode.
STORE	To store alterations made in menus.
NORM	To exit a menu without storing any changes.
MUTE	To mute or restore the sound.
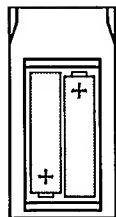
When using the handset be sure to point it towards the receiver front panel where the infra-red receiver window is located. The handset operates on two AA batteries. The batteries are to be found behind the sliding cover on the underside of the handset. At some time, the batteries will need replacing. Do this as soon as the handset fails to operate from normal viewing distance.

NOTE: Never leave flat batteries in the handset as they may leak and corrode the metal contacts.

Operation

The following information assumes that your dish aerial and receiver have been correctly installed. If this is not the case, refer to the Installation Guide in this manual.

Operation is carried out by use of the remote control handset. When selecting the on-screen graphics menus, it will be necessary to use several keys which must be pressed within a timeout period (usually 2 seconds between each key press). This is also true for other multi-key functions.

Switching On

After making all the necessary connections (see Installation Guide), connect the receiver, TV and/or VCR to the mains supply and switch on. Select the programme on your TV set that has been allocated to the receiver. When the mains supply is first connected, the receiver will be in its standby state. To bring the receiver out of standby, simply press the standby key or select a programme number using the handset.

Selecting Programmes

Programmes are selected by pressing the numeric keys 1-9, To select programmes above 9, press the P—key followed by the required programme number. For example, to select programme 10, press P—key followed by the 1 and 0 keys. It is also possible to browse through all the programmes using the ▲ or ▼ keys. The programme number and ident will be displayed briefly in the top of the TV screen.

Permanent Programme Ident Display

It is possible to permanently display the programme ident on your TV screen rather than for just a few seconds as is normal when switching between programmes. This feature is selected by pressing the SETUP key followed by the AUX/0 key. Repeat SETUP, AUX/0 to remove the feature. The programme ident can be altered from its default setting if desired. Refer to the Customizing Programmes section of this manual.

Audio Mute

To mute the sound, simply press the MUTE key. The MUTE symbol will appear on your screen and decrease in size to the top left hand corner. Press MUTE again to restore the sound.

Programme Status

Pressing the STATUS key will display the programme number and ident, audio mode and audio frequency of the programme you are viewing and the receivers clock (flashing if not set). This display will disappear after approximately 4 seconds.

Audio Mode

The Audio key is used to cycle through all the audio modes. On certain programmes it is possible to receive multi-language, stereo or radio transmissions, e.g. Sky One also transmits Sky Radio in addition to the Sky One soundtrack. To hear these alternative transmissions choose the desired programme then press the AUDIO key to select the required mode.

Operation

TV/SAT

If your receiver has been connected to your TV set using a SCART lead, the TV/SAT key will enable you to switch between terrestrial and satellite reception.

NOTE: This feature will only work with TV's that recognise pin 8 of the SCART socket.

Auxiliary Programme

Pressing the AUX/0 key will select an auxiliary programme which is set up to work with an external decoder or MAC Receiver.

Standby

To 'power down' the receiver, simply press the standby key. The receiver will stay in standby mode as long as the mains supply is connected.

IMPORTANT NOTE: Your receiver may have been installed by looping the TV aerial through the receiver. If this is the case, it is important that the receiver is always connected to the mains supply when terrestrial TV programmes are to be viewed.

On-screen Graphics Menus

Certain functions of the receiver are performed by use of on-screen graphics menus e.g. timer functions, modifying or adding new programmes. Once in a menu, the SETUP and STATUS keys are used to move forward and backward through the parameters and the ▲ and ▼ keys are used to alter parameters. Direct entry using the numeric keys is permissible and shall be highlighted as we go through the functions. If you want to undo alterations in a menu, simply press the NORM key and this will remove the menu from your screen and erase any changes.

Favourite Programmes

This receiver has the facility to store your ten favourite programmes in an on-screen menu, which allows you to access those programmes quickly and easily.

To use the facility, press F1 to bring the menu on screen. The menu is spread over two pages (5 programmes on each). Use the F1 key to switch between pages. Choose the programme you wish to view then press the corresponding numeric key on the handset. The picture will change to your selected programme and the menu will disappear.

It is likely that you will want to alter the programmes already stored in the menu when you buy your receiver. To Customize your own menu, press SETUP followed by F1 to bring the menu on screen. Again, the menu is spread over two pages (5 programmes on each). Use the F1 key to switch between pages. The SETUP or STATUS keys are used to select one of the ten numbers. (The picture will change to the programme stored in each location as you switch between numbers). Each line gives you the programme number and ident. Select the programme number you require by using the ▲ or ▼ keys or by directly entering the programme number using the P— and numeric keys. The ident will automatically change as you change the programmes. When you have made all your adjustments, press the STORE key to save the settings or NORM to exit the menu without saving. The picture will return to the programme you were viewing when you entered the menu.

NOTE: If you select a locked programme, this will be indicated by the key symbol.

Timer Functions

The receiver has a built-in timer facility which allows it to switch on and off at selected times. The primary use of this is to record satellite events, in conjunction with a VCR, whilst the receiver is unattended.

NOTE: The receiver and VCR must have the same start and stop recording times.

Setting the Receiver Clock

The Clock Set menu is selected by pressing the SETUP key followed by the 4 key. Once selected, the timer LED on the receiver front panel will be flashing. Adjust the day, hours (24-hour clock) and/or minutes using the ▲ and ▼ keys or by direct entry using the numeric key, using the SETUP or STATUS keys to move through the parameters. Pressing STORE will retain the new setting in memory and reset the seconds to zero. If you wish to undo alterations, simply press the NORM key. This will remove the menu from your screen and any changes made will be erased.

Setting the Timer

The Timer menu gives you the facility to preset up to 4 events each up to 14 days in advance. It is selected by pressing the SETUP key followed by the 5 key. The timer LED will be flashing. Again the SETUP, STATUS, ▲ and ▼ keys are used to control the menu.

NOTE: All changes in this menu are dynamically stored i.e. any adjustment is immediately stored when you move to the next option and pressing the NORM key in this instance will not return the menu to its previous state.

1) EVENT

Allows you to select the event number 1,2,3 or 4

2) PROG

Allows you to select the programme number you require when the timer switches on. A timed event is disabled when set to OFF.

NOTE: If a locked programme is selected, the programme ident will be preceded by a key symbol.

3) DAY

Allows you to select the day of the event. Current day will be displayed as TODAY and subsequent days are prefixed 1ST and 2ND to cover the relevant weeks

4) START

Allows you to enter the start time of the event in hours and minutes by direct entry using the numeric keys or with the ▲ and ▼ keys

5) STOP

Allows you to enter the stop time of the event in hours and minutes by direct entry using the numeric keys or with the ▲ and ▼ keys.

NOTE:If a stop time is entered that is earlier than the start time, the next day is automatically assumed for the stop time.

To exit the menu press either the NORM or STORE key. If any recording times conflict with each other, they are detected by the timer and an EVENT OVERLAP alarm is displayed on the TV screen. This alarm may be ignored by pressing the NORM key in which case the end of the overlapped event will be lost. The error may be corrected by re-entering the Timer menu and adjusting the start/stop times. If a locked programme has been stored in the programme option, the message EVENT USES LOCKED PRO-GRAMME will appear on screen. This programme will have to be unlocked to enable the event to be recorded.

Enabling/Disabling Timer

Having set the Timer menu all that is now required is to enable it. This is done by pressing the SETUP key followed by the 6 key. The timer LED will illuminate and the receiver will go into standby, coming on only at the preset times. When all events have been completed the receiver will return to standby and the timer LED will be extinguished.

If, upon pressing the enabling sequence, the message NO EVENT ENABLED appears on your screen, no timer settings have been made and the receiver will not go into standby .

To disable the timer, simply press the SETUP, 6 keys again.

NOTE: When using the timer function for recording satellite programmes, the receivers TV SCART socket is disabled. Therefore, to monitor the satellite receiver during a timed event the UHF aerial loop-through connection must be used.

Sleep Timer

The Sleep timer is a useful way of switching the receiver off at a later time or as an instant record feature in conjunction with your VCR.

Press the SETUP key followed by the 7 key to select the menu. The timer LED will be flashing. The start time will be assumed as the current time and stop time will default to plus half an hour from the current time. The stop time can be adjusted by direct entry using the numeric key or with the ▲ and ▼ keys, using the SETUP or STATUS keys to move between hours and minutes. Pressing the STORE key saves the setting, the menu will disappear and the timer LED will illuminate. The receiver will continue to operate until the stop time, then go into standby.

If you want to return to normal operation before the stop time, simply press the SETUP, 7 keys again. The SLEEP TIMER CANCELLED message will briefly appear on screen.

Instant Record

To utilise the Sleep timer menu for instant recording with your VCR, simply select the programme you wish to record and follow the procedure above for setting the start/stop times.

NOTE: In these modes, all other handset commands will be ignored.

Viewing Scrambled Transmissions (IRD only)

Certain satellite programmes are transmitted in an encoded form that require de-scrambling by the end user. The STU 801 IRD comes to you with an integral VideoCrypt decoder that allows you to view only programmes that are scrambled using the VideoCrypt system when used with a suitable viewing card. A subscription must be paid for a viewing card to allow you to view these programmes.

For details on getting a viewing card contact your dealer or Sky Television as follows:

Sky Subscribers Services Ltd.,   Tel: 0506 460000
PO Box 43,
Livingston,
West Lothian, EH54 7DD.

Viewing Scrambled Programmes

Select the scrambled programme you wish to view. The message PLEASE WAIT will be super-imposed on the scrambled signal. After a few seconds the PLEASE INSERT CARD message will be seen. Insert your viewing card fully into the front panel slot (arrow uppermost and pointing into the receiver). The picture will de-scramble after a few seconds and you will be able to view until such a time that the card is removed or it expires.

Renewing the Viewing Card

Viewing cards work for a fixed period only. You will be sent a replacement card as long as you subscribe.

Activating a New Viewing Card

To activate your new card it will be necessary to insert your old viewing card first, wait until a picture appears or the message YOUR CARD HAS EXPIRED is returned, then immediately substitute your new card for the old. Check that the new card successfully descrambles all broadcasts to which you have subscribed.

NOTE: Your new card may not work if this procedure is not followed.

Parental Control Facility

A special key card may be available in the future from your Subscriber Service Centre for a small additional charge which can be used in conjunction with your viewing card to control the decoding of programmes not suitable for children. The ordinary viewing card will allow access to all authorized VideoCrypt programmes. Contact your Subscriber Service Centre for details. Full instructions for use will be supplied with the key card.

Viewing Scrambled Transmissions (IRD only)

Authroizing Pay-per Satellite TV

In the future, some programmes may operate a pay-per-view feature for certain events using a token card (similar to a telephone token card). This card is inserted in the slot on your receiver front panel. To authorize the purchase of a programme, press the SETUP key followed by the F2 key. This will bring the PLEASE CONFIRM prompt on to your TV screen. Press F2 again, and this will give the CONFIRMED message and the previously scrambled picture will be unscrambled.

Lost or Stolen Cards

Contact Sky Subscriber Services. They will issue you with a new card after you have submitted your subscriber number or name, address and postcode.

NOTE: A small handling charge may be incurred for the service.

VideoCrypt Screen Messages

PLEASE INSERT CARD - Make sure your card is fully inserted into the receiver.

PLEASE WAIT - Wait. If the card is valid and entitled for the selected programme, the de-scrambled picture will appear in a few seconds.

YOUR CARD IS INVALID - Make sure your card in inserted correctly. If the message persists, it may be that the card itself is damaged. If necessary contact Sky Subscriber Services.

PROGRAMME RESTRICTED - The programme has a parental control viewing restriction. Remove the present card and insert the keycard to lift the restriction.

INSERT VIEWING CARD - Remove the present card and insert the viewing card.

INSERT OLD CARD - The old card must be inserted before the new card is activated.

YOUR CARD HAS EXPIRED - Replacement card needed. Contact Sky Subscriber Services.

CHANNEL RESTRICTED - Your subscription is not valid for this programme.

CARD RESTRICTED - There is a problem with your card. Contact Sky Subscriber Services.

PLEASE CALL SKY - There is a problem with your subscription. Contact Sky Subscriber Services.

YOUR CARD IS BLOCKED - There is a problem with your subscription. Contact Sky Subscriber Services.

YOUR BILL IS OVERDUE - Contact Sky Subscribers Services and/or pay the bill to avoid service cut off.

Parental Lock

The parental lock feature of the receiver allows you to 'lock out' some or all of the satellite programmes. In simple terms, you create a personal identification number (PIN) and allocate it to the programme(s) you wish to lock to prevent unauthorized use. Once a programme is locked, it can only be viewed by re-entering the PIN. It is not essential to Customize the PIN, but it is recommended.

NOTE: When entering PIN's, each key press will be presented as a dash (-) on the TV screen for secrecy.

Customizing the PIN

To Customize the PIN, press the SETUP key followed by the STORE key. This will bring the ENTER PIN prompt onto the screen. Enter 1 2 3 4 (the default setting) using the numeric keys. The NEW PIN prompt will then appear. Enter your selected PIN (four digits). The screen will then ask you to CONFIRM PIN. Re-enter your selected PIN. This is a safeguard device to ensure you have entered the correct PIN. If any difference occurs between the NEW and CONFIRM PIN's, the message FAILED will appear and it will be necessary to repeat the sequence, otherwise the CONFIRMED message is issued and the change is stored.

IMPORTANT NOTE: If at any time you forget your PIN it will be necessary to contact your dealer, who shall explain the procedure for restoring the PIN to 1234.

Locking Procedure

Having created your PIN, select the programme you wish to lock and press the SETUP key followed by the STATUS key. The TO LOCK ENTER PIN prompt will appear. After entering your PIN, the message LOCKED will appear. Any subsequent efforts to view the locked programme will be met with, for example, the PROG (1 SKY1) LOCKED ENTER PIN prompt. Enter your PIN to view the programme.

This unlocked condition is temporary and will last only whilst the selected programme is viewed. To permanently unlock the previously locked programme, enter the locked programme (as described above), then press the SETUP key followed by the STATUS key. The message TO UNLOCK ENTER PIN will appear. Enter your PIN. Upon receipt of a valid PIN the UNLOCKED message is displayed and the programme is permanently unlocked. An incorrect PIN will produce the NOT VALID PIN message.

Menu Locking Feature

To further extend the level of security, it is possible to 'lock out' the Customization and Installation menus together with the frequency scan mode. This is achieved by locking programme 0 using the locking procedure described above. Once locked, no alterations can be made to any programme information. To regain access, simply unlock programme 0.

Installation Guide for the Installation Engineer

Connecting Stereo Equipment

To obtain the maximum performance from your satellite viewing, it is recommended that the receiver is connected to either a stereo TV, a stereo amplifier or hi-fi stack system.

Connect phono leads from the AUDIO OUT sockets on the receiver to an amplifier which is switched to Auxiliary Input. Speakers should be positioned either side of the TV.

If a stereo TV is used, you must use a SCART lead to connect the TV and receiver to hear true stereo. Then select AV or AUX on the TV.
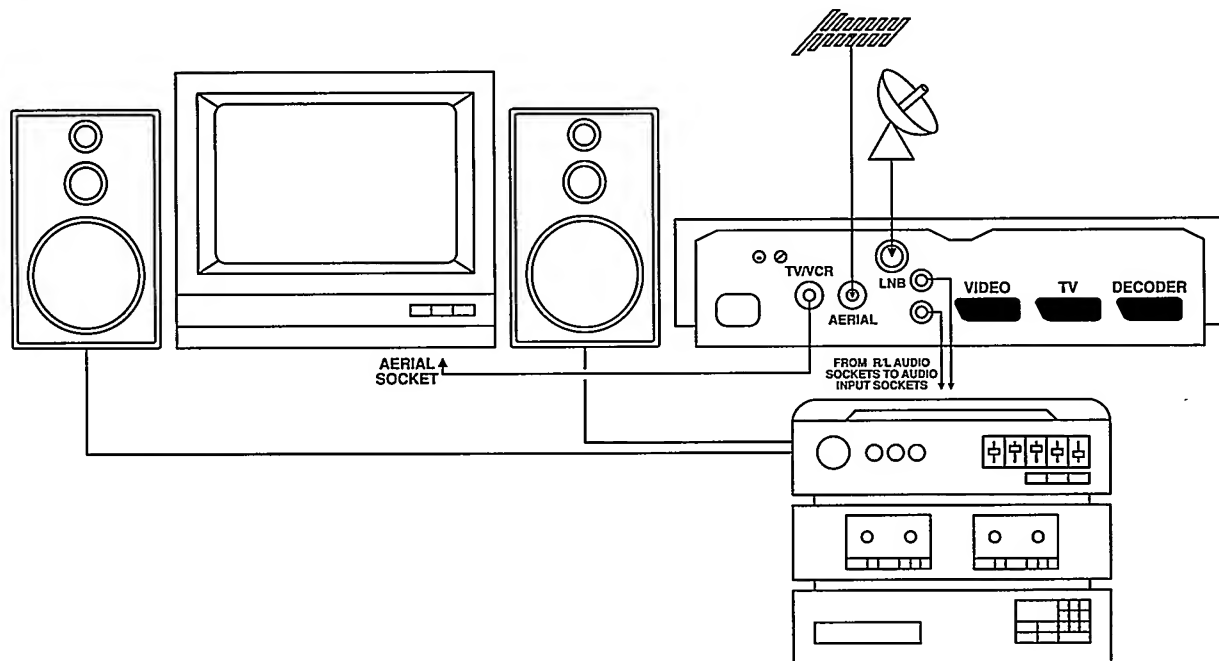
Installation Guide for the Installation Engineer

Tuning In the TV/VCR to the Satellite Receiver using the aerial socket

Having connected the receiver to the dish aerial, TV (A.) and/or VCR (B.), switch on all the equipment. Select a programme on your TV/VCR you want to allocate to satellite programmes and bring the receiver out of standby. If a picture is not visible, move the SETUP/NORM switch on the rear panel to SETUP. If two vertical bars (the test signal) are not visible then adjust either the TV/VCR to channel 38 or the channel adjustment screw CH on the receiver rear panel to the same frequency as the TV/VCR. Once the two vertical bars are visible move the SETUP/NORM switch to NORM. If installation is correct a satellite picture should be visible. It may be necessary to fine tune the TV for the sharpest possible picture.

A.

TV/VCR LNB VIDEO TV DECODER AERIAL

AERIAL SOCKET

B.

FROM TV SOCKET TO AERIAL SOCKET

TV/VCR LNB VIDEO TV DECODER AERIAL

AERIAL SOCKET
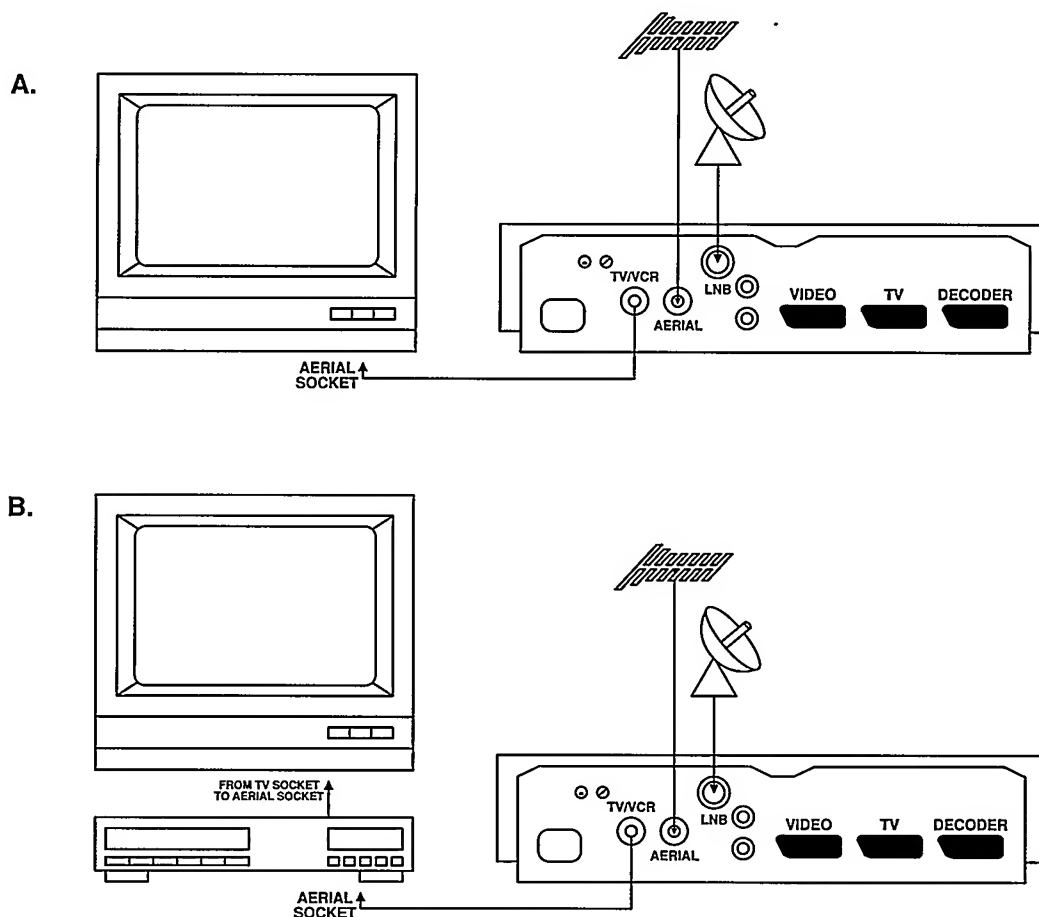
Installation Guide for the Installation Engineer

VCR record/replay using SCART

When using a SCART lead to connect a VCR, the following must be noted. To record from the satellite receiver to a VCR it will be necessary to select AUX or AV on the VCR as the programme to record. When replaying the VCR through the satellite receiver, switch the satellite receiver to standby or select TV using the TV/SAT key.

NOTE: This method of replaying is only possible if the TV is also connected using a SCART lead.
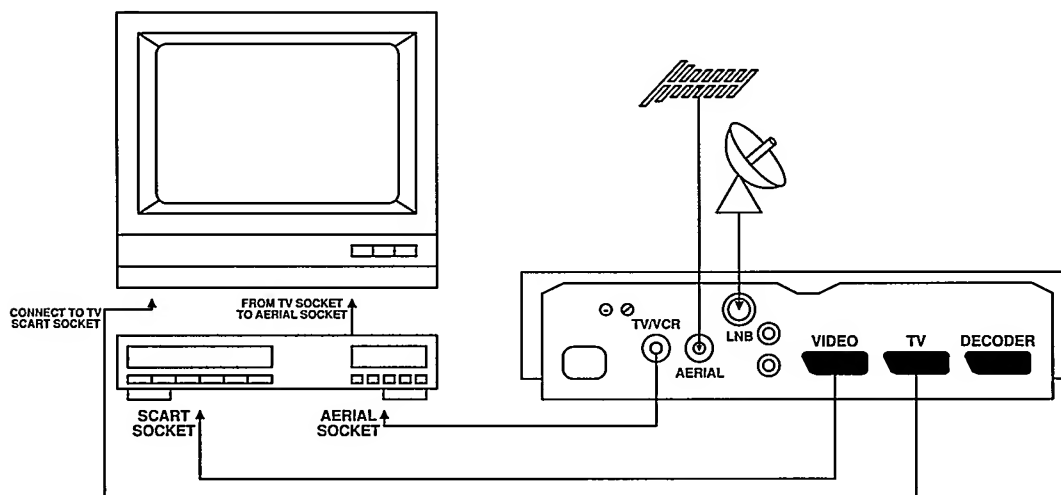
Installation Menu

Pressing the SETUP key followed by the 2 key will bring the installation menu on screen.The timer LED will be flashing.

LNB Offset

If the picture is speckly, it may be necessary to adjust the LNB offset to correct for variations in the LNB output frequency.

A few minutes must be allowed for the LNB to reach its operating temperature before making any adjustments. Check that the vision frequency for the chosen programme is correct by entering the customization menu (see Modifying Existing Programmes section)and comparing it with the programme line-up frequency found in the back of this manual e.g. programme 7 (MTV) is 11.421GHz. Use the ▲ or ▼ keys to adjust the LNB offset to get a picture as free from sparkles as possible. To optimize the picture, it is possible to change programmes whilst in this menu by directly entering the programme number using the P — and/or the numeric keys.

LNB SAT

This option allows the vision frequency displayed in the customization menu to be configured for LNBs covering different frequency bands. The following three bands are catered for:-

1. FSS   10950-12100 (ie Astra)
2. DBS   11700-12850 (ie TDF)
3. TELECOM   12425-13575 (ie French TELECOM)

Changing this option will not alter the receiving frequency of the receiver, only the number displayed.

Contrast

This option is the contrast setting which may be set to low, medium or high.

NOTE: Below the contrast setting is a six digit number. This is the receivers software version number and can not be adjusted.

Pressing the STORE key will retain any adjustments made. This is normally all that will be required when installing and setting up the receiver.

Customization Menu

The receiver is capable of storing 90 programmes and comes to you pre-tuned to the 32 Astra 1A/1B programmes. However, if you wish to modify or add new programmes the following section explains the procedures.

Modifying Existing Programmes

Select the programme you wish to modify and bring the customization menu onto your screen. This is done by pressing the SETUP key followed by the 1 key. When on screen, the timer LED will be flashing. If, when using the on-screen graphics menus, you wish to undo alterations, simply press the NORM key. This will remove the menu from your screen and erase any changes. Once in a menu, the SETUP and STATUS keys are used to move forward and backward through the parameters and the s and t keys are used to alter parameters.

The following options are available spread over two pages.

1) FREQUENCY

The vision frequency can be adjusted and it is possible to directly enter the frequency using the numeric keys. For example, for a programme on the frequency of 11.214GHz, simply press the 1, 1, 2, 1, 4 keys. *Note : The frequency number displayed will be dependent on the LNB SAT option. (See the Installation menu.)*

2) POLARITY

Satellite TV programmes are transmitted either vertically (V) or horizontally (H). The correct polarity must be assigned to each programme.

3) BASEBAND

The baseband output is used to feed an external decoder. This signal falls into two main categories, PAL or MAC. All the preset programmes of this receiver are set to PAL. In the future some programmes may choose the MAC system. This option allows you to switch the baseband output, provided by the DECODER SCART, to be either filtered for a PAL decoder or for a MAC decoder.

NOTE: The DECODER SCART provides for two external decoders, EXT1 using the standard SCART configuration of pins 8, 19 and 20, and EXT2 using pins 18, 10 and 14. The EXT1 input can support both audio and video loop-through. The EXT2 input can only support video loop-through.

4) AV SOURCE

The Audio and Video source can be selected from four options:

INT - internal audio and video. In this mode no external audio or video loop-through takes place, therefore ignoring any external decoder.

EXT AV external audio and video loop-through of EXT1 from the DECODER SCART to the TV SCART, irrespective of the status of pin 8.

EXT V - external video loop-through only of both EXT1 and EXT2 from the DECODER SCART to the TV SCART. Internal audio. Irrespective of the status of pins 8 or 18.

AUTO - automatic audio and video loop-through of EXT1 controlled by pin 8 of the DECODER SCART to the TV SCART. Automatic video loop-through of EXT2 controlled by pin 18 of the DECODER SCART to the TV SCART.

The default option for all programmes is AUTO so that if a decoder is used which controls pin 8 or 18 of the DECODER SCART, the audio and video loop-through feature is automatically enabled. A decoder which does not control the status pins requires the EXT V option to force loop-through to take place.

NOTE : If you select EXT V or EXT AV without an external decoder fitted, the picture will disappear.

Customization Menu

5) Decoder

This option is dependent on the setting of the AV Source to determine which decoder sources may be used.

AV source INT, decoder options are INT (for the VideoCrypt decoder) or NONE.

AV source AUTO, decoder option is AUTO and will be skipped for the next menu option (AUDIO).

AV source EXT V, decoder options EXT1 or EXT2.

AV source EXT AV, decoder options EXT1 or EXT2.

Note: EXT2 selects external video/internal audio.

6) AUDIO

As we have already seen, the audio mode can be changed for each programme using the Audio key. When in the customization menu, the AUDIO key or ▲ and ▼ keys can also be used to perform the same function. Listed below are the preset audio frequencies:

STEREO A	7.02 & 7.20 MHz
STEREO B	7.38 & 7.56 MHz
STEREO C	7.74 & 7.92 MHz
STEREO D	8.10 & 8.28 MHz
MONO 1	6.50 MHz
MONO 2	7.02 MHz
MONO 3	7.20 MHz
MONO 4	7.38 MHz
MONO 5	7.56 MHz
MONO 6	7.74 MHz
MONO 7	7.92 MHz
MONO 8	8.10 MHz
MONO 9	8.28 MHz

NOTE: The stereo LED will come on when stereo mode is selected. This does not necessarily indicate that the transmission is in stereo.

7) FREQ

Using the ▲ and ▼ keys, this option allows you to vary the audio frequency for both mono and stereo modes, thus enabling you to tune into programmes using audio frequencies different to the preset ones. If the preset frequency is changed, this will be indicated by the AUDIO option changing from say MONO 3 to MONO V to show that it has been altered from its original setting and a variable mode has been selected.

NOTE: At the bottom of the screen is the PANDA noise reduction indicator. This will be on unless Mono 1 is selected.

8) Name

The default programme ident can be altered with this option (up to a maximum of six digits). The ▲ and ▼ keys select alphas or numerics and pressing SETUP will move the cursor to the next digit and so on. The STATUS key will move the cursor back. Programme 90 has been designated the TEST programme and cannot be renamed.

Adding New Programmes

To add new programmes it will be necessary to first locate them. This can most easily be done using the FREQUENCY SCAN MODE which is enabled by pressing the SETUP key followed by the 3 key. The timer LED will flash as the receiver scans for programmes on the polarity you were last viewing. When a picture is present, the scan speed will automatically decrease allowing the user time to press the SETUP key and halt the scan. The picture will have the Customization menu superimposed on it. Continue as described in the Modifying Existing Programmes section to fine tune this new programme. If the scan is not terminated while a picture is present, normal scan speed will be resumed until the next signal is encountered. To quickly end a scan, press the NORM key. To scan for programmes on the opposite polarity, simply press the AUDIO key while scanning. This will toggle the polarity on each press.

Fitting of External Decoders

The receiver has the capability of accepting two external decoders via the DECODER SCART socket on the rear panel of the receiver. If an external decoder correctly controls pin 8 or 18 of the DECODER SCART socket, the receiver will switch automatically to this input otherwise it will be necessary to set the AV source setting to EXT V and the decoder option to either EXT 1 or EXT 2.

Fitting of MAC Decoders

If it is required to connect a MAC Receiver into the system then use the DECODER SCART socket and press AUX/0 on the handset to select the MAC Receiver. It is recommended that all other programmes not using an external decoder have the AV source option set to INT.

NOTE: If two pieces of equipment are to be used i.e. a MAC Receiver and a PAL Decoder, the MAC Receiver must be connected to EXT1 (PINS 8, 19 and 20). Contact your dealer for a suitable lead.

Scart Connections

	DECODER SCART	TV SCART	VCR SCART
1.	Audio Out RH (Decoder 1)	Audio Out RH	Audio Out RH
2.	Audio In RH (Decoder 1)	-	Audio In RH
3.	Audio Out LH (Decoder 1)	Audio Out LH	Audio Out LH
4.	Audio Earth (Decoder 1)	Audio Earth	Audio Earth
5.	Blue Earth	Blue Earth	-
6.	Audio In LH (Decoder 1)	-	Audio In LH
7.	Blue In	Blue Out	-
8.	Decoder 1 Status	CVBS Status	CVBS Status
9.	Green Earth	Green Earth	-
10.	Decoder 2 Baseband Out	-	-
12.	Not implemented.		
11.	Green In	Green Out	-
13.	Red Earth	Red Earth	-
14.	Decoder 2 Input	-	-
15.	Red In	Red Out	-
16.	RGB Status	RGB Status	-
17.	Decoder Earth	Video Earth	Video Earth
18.	Decoder 2 Status	RGB Status Earth	-
19.	Decoder 1 Baseband Out	Video Out	Video Out
20.	Decoder 1 Input	-	Video In
21.	Casing Socket Earth	Casing Socket Earth	Casing Socket Earth

NOTE: The RGB pins on the DECODER and TV SCART sockets are simply linked together to allow the use of a MAC decoder. See page 16 for more details on connecting a VCR and decoder.

Front Panel Functions

Some of the receiver's setup functions may be carried out by using the front panel keys singularly or in certain configurations to bring menus on screen. Keys must be pressed simultaneously and held down until the function appears.

IMPORTANT NOTE: The front panel keys are intended for use in this manner only when the remote handset is not available.

In normal operation

Keys	Function
STANDBY and ▲	Selects Customization Menu
STANDBY and ▼	Selects Frequency Scan Mode
▲ and ▼	Same as NORM key on handset
STANDBY, ▲ and ▼	Selects Installation Menu

When in a menu

Key/▲	Function
STANDBY	Same as SETUP key on handset
▲	Same as ▲ key on handset
▼	Same as ▼ key on handset
▲ and ▼	Same as NORM key on handset
STANDBY, ▲ and ▼	Same as STORE key on handset

Quick Reference list of Commands

Key/▲	Function
SETUP and 1	Customization Menu
SETUP and 2	Installation Menu
SETUP and 3	Frequency Scan
SETUP and 4	Set Clock
SETUP and 5	Set Timer
SETUP and 6	Enable Timer
SETUP and 7	Sleep Timer
SETUP and STATUS	Lock Programme
SETUP and STORE	Customize Pin
SETUP and 0	Permanent Programme Ident
SETUP	Move forward through a menu
STATUS	Move backward through a menu
AUDIO	Change polarity in frequency scan

Astra Programme Line-Up

Prog.	Transponder	Channel	Freq	Audio	Polarity	AV Source/Decoder
1	ASTRA8	SKY 1	11.318GHz	Stereo A	V	Auto/Auto
2	ASTRA12	SKY NEWS	11.376GHz	Stereo A	V	Auto/Auto
3	ASTRA16	SKY MOVIES+	11.435GHz	Stereo A	V	Auto/Auto
4	ASTRA18	MOVIE CHANNEL	11.479GHz	Stereo A	V	Auto/Auto
5	ASTRA20	SKY SPORT	11.508GHz	Stereo A	V	Auto/Auto
6	ASTRA22	EUROSPORT	11.538GHz	Mono 2	V	Auto/Auto
7	ASTRA1	SCREENSPORT	11.214GHz	Mono 3	H	Auto/Auto
8	ASTRA15	MTV	11.421GHz	Stereo A	H	Auto/Auto
9	ASTRA5	LIFESTYLE	11.273GHz	Stereo A	H	Auto/Auto
10	ASTRA11	FILMNET	11.362GHz	Mono 2	H	Auto/Auto
11	ASTRA19	ARD 1 PLUS	11.494GHz	Stereo A	H	Auto/Auto
12	ASTRA21	TELE 5	11.523GHz	Stereo A	H	Auto/Auto
13	ASTRA6	SAT.1	11.288GHz	Mono 2	V	Auto/Auto
14	ASTRA10	3 SAT	11.347GHz	Stereo A	V	Auto/Auto
15	ASTRA14	PRO 7	11.406GHz	Mono 2	V	Auto/Auto
16	ASTRA2	RTL	11.229GHz	Mono 2	V	Auto/Auto
17	ASTRA13	RTL-V/4	11.391GHz	Stereo A	H	Auto/Auto
18	ASTRA17	PREMIERE	11.464GHz	Stereo A	H	Auto/Auto
19	ASTRA9	TELECLUB	11.332GHz	Mono 2	H	Auto/Auto
20	ASTRA23		11.553GHz	Stereo A	H	Auto/Auto
21	ASTRA26		11.597GHz	Stereo A	H	Auto/Auto
22	ASTRA24		11.567GHz	Stereo A	V	Auto/Auto
23	ASTRA28		11.627GHz	Stereo A	V	Auto/Auto
24	ASTRA32		11.685GHz	Stereo A	V	Auto/Auto
25	ASTRA25		11.582GHz	Stereo A	H	Auto/Auto
26	ASTRA27		11.612GHz	Stereo A	H	Auto/Auto
27	ASTRA4		11.258GHz	Mono 2	V	Auto/Auto
28	ASTRA30		11.656GHz	Stereo A	V	Auto/Auto
29	ASTRA7	TV 1000	11.303GHz	Stereo A	H	Auto/Auto
30	ASTRA3	TV3 SWEDEN	11.244GHz	Stereo A	H	Auto/Auto
31	ASTRA29	TV3 DENMARK	11.641GHz	Stereo A	H	Auto/Auto
32	ASTRA31	TV3 NORWAY	11.671GHz	Stereo A	H	Auto/Auto

Technical Specifications

Number of Programmes	90
Receiving Frequency	950-1750MHz
LNB Output Voltage	18V
Polarity switching	Vert 14V, Horiz 18V
Input Impedance	75 Ohm
I.F. Frequency	479.5MHz
I.F. Bandwidth	27MHz
Input Level	-65 to -25 dBm
Image Rejection	50dB (typically)
Input Connector	Type F Female
Dynamic Threshold	6.5dB C/N (typically)
Video De-emphasis	CCIR 405-1
Video Output Level	1v p-p
Video Output Impedance	75 Ohm
Video Frequency Response	50Hz to 4.8MHz +/-3dB
Video Output Connector	SCART
Baseband Output Level	1v p-p
Baseband Modes (PAL/MAC)	PAL/MAC De-emphasis (Software Switched)
Baseband Frequency Response (MAC)	DC to 10.5MHz
Energy Dispersion Removal	Greater than 40dB
Audio Modes	Main Mono (Tunable)
	Stereo Pairs (Tunable)
	Individual Channels (Tunable)
Main Mono Subcarrier	5.0 to 10.0MHz tunable
Preset Stereo Subcarriers	7.02 & 7.20MHz PANDA 1
	7.38 & 7.56MHz PANDA 1
	7.74 & 7.92MHz PANDA 1
	8.10 & 8.28MHz PANDA 1
	All tunable from 5.0 to 10.0MHz
Audio Frequency Response	50Hz to 16KHz +/-3dB
Audio Output Level	0dBm/600 Ohm
Audio Bandwidth	150KHz
Audio Output Connector	SCART and PHONO's
U.H.F. Modulator	CCIR CH30 to 39 with test signal preset to channel 38
Operating voltage	220-240V ~ 50Hz
Power Consumption	35 Watts (typically)
Dimensions	H 58mm, W 360mm, D 200mm
Weight	1.8Kg

502-9200030